

CHAMPVA POLICY MANUAL

CHAPTER: 2
SECTION: 20.12
TITLE: **NEUROMUSCULAR ELECTRICAL STIMULATION (NMES) DEVICES**

AUTHORITY: 38 CFR 17.270(a) and 17.272(a)

RELATED AUTHORITY: 32 CFR 199.4(d)(3)(ii)

I. EFFECTIVE DATE

- A. June 22, 1984, for neuromuscular stimulation for scoliosis.
- B. July 8, 1998, for all other NMES devices.

II. PROCEDURE CODE(S)

- A. CPT codes: 64550-64595, 95970-95975, 97014, 97032, 97116
- B. HCPCS Level II codes: E0731, E0744-E0745, K0600

III. DESCRIPTION

Neuromuscular electrical stimulation (NMES) devices contain a power supply (general rechargeable batteries), a signal generator, a control circuit, a modulating circuit and output circuit, and electrodes. Electrodes may be superficial, percutaneous, or implanted. Functional electrical stimulation is artificial electrical stimulation of muscles to produce movements such as standing, waking, and grasping. NMES is used to facilitate voluntary motor control and temporarily reduce spasticity in patients suffering from spinal cord injury, cerebral palsy, or other upper motor neuron disorders. NMES units are considered Class II devices.

IV. POLICY

A. When used in a program approved by the attending physician, CHAMPVA may cost share NMES for the following indications:

1. for prevention and/or treatment of disuse atrophy resulting from the casting of a limb or contracture due to burn scarring, and following prolonged immobilization, injury, or surgery; or
2. for spinal cord injury and other motor neuron disorders, such as cerebral palsy; or
3. for idiopathic scoliosis in pediatric and adolescent patients.

B. The device must be approved by the Food and Drug Administration (FDA) for commercial marketing for a specific application and must be considered medically necessary for the treatment of the condition for which the device is intended.

C. NMES devices approved by FDA (e.g., Parastep I System, Respond II, etc.) may be cost shared on an inpatient or outpatient basis to enhance walking for spinal cord injured (SCI) patients. Coverage is limited to SCI patients who have completed a training program, consisting of at least 32 physical therapy sessions with the device over a three-month period and with all of the following characteristics:

1. persons with intact lower motor units (L1 and below, both muscle and peripheral nerve);
2. persons with muscle and joint stability for weight bearing at upper and lower extremities that can demonstrate balance and control to maintain an upright support posture independently;
3. persons who demonstrate brisk muscle contraction to NMES and have sensory perception of electrical stimulation sufficient for muscle contraction;
4. persons who possess high motivation, commitment, and cognitive ability to use such devices for walking;
5. persons who can transfer independently and can demonstrate standing independently for at least 3 minutes;
6. persons who can demonstrate hand and finger function to manipulate controls;
7. persons with at least 6-month post recovery spinal cord injury and restorative surgery;
8. persons without hip and knee degenerative disease and no history of long bone fracture secondary to osteoporosis; and
9. persons who have demonstrated a willingness to use the device long term.

D. For other conditions, the medical necessity of the device must be documented and will be referred to medical review.

V. POLICY CONSIDERATIONS

A. Claims must be sufficiently documented to confirm that a proper evaluation of the patient's medical and physical condition have been made ascertaining that the patient requires such a device and is capable of handling it safely.

B. The neuromuscular electrical stimulator will be cost shared under the durable medical equipment guidelines (see [Chapter 2, Section 17.1](#), *Durable Medical Equipment*).

C. Initial or subsequent electronic analysis and programming of neurostimulator pulse generators are covered only as an adjunct to covered NMES services.

VI. EXCLUSIONS

A. NMES devices used by SCI patients who have epilepsy, cognitive deficiencies, osteoporosis, spasticity, **cardiac pacemakers or cardiac defibrillators, severe scoliosis, irreversible contracture, autonomic dysreflexia, skin disease or cancer at the area of stimulation** or other conditions that could interfere with its safe use.

B. NMES devices used on denervated muscle. [38 CFR 17.272 (a)(14)]

C. NMES devices used as part of an exercise program of healthy individuals (i.e., athletes). [38 CFR 17.272(a)(4)]

D. The treatment of scoliosis with implanted electrical muscle stimulation.

E. NMES devices in conjunction with a reciprocating gait orthosis (RGO).

END OF POLICY